

ABSTRACT OF THE DISCLOSURE

A solid-state laser device consists of a gain medium in the shape of a polyhedron.

- 5 A beam enters the gain medium at one surface of the polyhedron and is reflected internally at one or more surfaces with each reflection occurring in approximate the same plane as the plane of incidence of the incident beam. The beam enters and exits the gain medium at different locations. Pump radiation enters the polyhedron through one or more faces. The laser device may be used as the gain medium for a laser oscillator or a laser
- 10 amplifier. In one variation, the polyhedron contains an internal core section in which there is no gain material. In another variation, the gain medium further includes one or more surfaces oriented to achieve a 90 degree internal reflection of the beam.